

## **REMARKS/ARGUMENTS**

Claims 1-16 remain in the application. Of these, claims 1-15 stand rejected, and claim 16 is newly presented.

Support for claim 16 is found, at least, in paragraph [0014].

### **1. Provisional Rejection of Claims 1-6 and 10-13 under the Judicially Created Doctrine of Obviousness-Type Double Patenting**

Claims 1-6 and 10-13 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting, as being unpatentable over claims 1, 3-7, 13 and 17 of copending Application No. 10/681,068. The Examiner's rejection is duly noted, and a Terminal Disclaimer will be filed if and when Application No. 10/681,068 matures into a patent.

### **2. Rejection of Claims 1-4 and 10-13 under 35 USC 102(b)**

Claims 1-4 and 10-13 stand rejected under 35 USC 102(b) as being anticipated by Fulks (US Pat. No. 4,727,312).

With respect to claim 1, the Examiner asserts that Fulks teaches "determining a required memory needed to execute the plurality of test vectors" in column 1, lines 16-19. Applicant disagrees.

Fulks' column 1, lines 16-19, simply state, "Because each vector has a large number of components, and because the number of vectors is large, the memory needed to store a test program in a test is expensive." This is nothing more than a general observation that test programs typically have a lot of test vectors, and that the memory needed to store a test program is "large". However, this simple observation does not teach or suggest that the "required memory needed to execute [a] plurality of test vectors" should in any way be determined.

Nor does Fulks disclose any reason that would prompt a person to want to determine the required memory needed to store a test program (e.g., to notify a user that additional memory is needed (claim 8); to bill a user for memory (claim 16); etc.).

Claim 1 is believed to be allowable for at least the above reasons.

With respect to claims 2-4, the Examiner asserts that Fulks *implies* "determining a required memory needed for each of a plurality of boards of a tester to execute the test vectors for the board" (claim 2), "determining a required memory needed for each of a plurality of pins of a tester to execute the test vectors for the pin" (claim 3), and "counting the number of test vectors for each test in the test file" (claim 4), in column 1, lines 10-13 and 16-19. Applicant disagrees.

In describing the "Background" of his invention, Fulks states:

The increasing complexity of digital circuits has increased the difficulty of testing them. In order to test such circuits adequately, signals must be applied to and sensed at a large number of circuit terminals simultaneously. The set of signals simultaneously applied or expected is commonly referred to as a vector, and a large string of vectors must be applied in sequence to test complex circuits adequately. Because each vector has a large number of components, and because the number of vectors is large, the memory needed to store a test program in a test is expensive.

Fulks, col. 1, lines 9-19.

Applicant cannot find any *implication* in the above teaching that "the required memory needed to execute [a] plurality of test vectors" should be determined. In fact, applicant cannot even find an *implication* that required memory should be *determined*. Claims 2-4 are therefore believed to be allowable.

Claims 10-13 are rejected for reasons similar to why claims 1-4 are rejected. Applicant therefore believes that claims 10-13 are allowable for reasons similar to why claims 1-4 are believed to be allowable (and also because Fulks does not teach any sort of "system" with "logic" for executing the steps of applicant's methods).

### 3. Rejection of Claims 5-9, 14 and 15 under 35 USC 103(a)

Claims 5-9, 14 and 15 stand rejected under 35 USC 103(a) as being anticipated by Fulks (US Pat. No. 4,727,312) in view of Hughes (4,493,079).

With respect to claim 5, the Examiner asserts that Fulks teaches the subject matter of claim 1 (from which claim 5 depends), and that, in column 5, lines 16-18, Hughes teaches the method of determining required memory set forth in claim 5. Applicant disagrees.

Although Hughes teaches that test vectors may be stored in "pin memories", and teaches how to store test vectors in pin memories, Hughes does not indicate that a memory requirement for each pin of a tester should be determined. Instead, it appears that Hughes merely presumes that enough memory exists to store the test vectors of a particular test program. Under such a presumption, it is understandable why Hughes would not disclose a need to determine any sort of "required memory".

Hughes also fails to teach or suggest:

for each additional pin of the tester,  
determining a second memory requirement needed for the additional pin to execute the test vectors for the first test; and  
if the second memory requirement is greater than the first memory requirement, setting the required memory equal to the second memory requirement.

In effect, the above methodology sets a "per pin" memory requirement to a maximum memory requirement for any pin. This is clearly not taught by Hughes.

Claim 5 is believed to be allowable for at least the above reasons. Claim 6 is believed to be allowable, at least, because it depends from claim 5.

With respect to claims 7-9, 14 and 15, the Examiner asserts that the limitations of these claims, although not shown by Fulks nor Hughes, would have been obvious because "Fulks discloses that a data-engine controller 34 can be arranged to perform other types of task too." See, 1/24/2006 Office Action, p. 6. Applicant disagrees. The Examiner is merely asserting that, because Fulks' and Hughes' teachings could be modified in some unknown way, one of ordinary skill in the art would have been

motivated to do so. Applicant disagrees, and believes that the Examiner has clearly not made a prima facie case for rejecting any of claims 7-9, 14 or 15. These claims are therefore believed to be allowable.

#### 4. Conclusion

In light of the amendments and remarks provided herein, applicant respectfully requests the timely issuance of a Notice of Allowance.

Respectfully submitted,  
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